



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,907	10/21/2005	Gerd Hoffman	08215-580US1	5392
26171	7590	05/03/2006		
FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022				
EXAMINER FIGUEROA, FELIX O				
ART UNIT 2833				
PAPER NUMBER				

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/518,907

Applicant(s)

HOFFMAN ET AL.

Examiner

Felix O. Figueroa

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 25-45 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 25-45 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/23/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure. It should avoid using phrases which can be implied, such as, "This invention relates to," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 25-40 and 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Embo (US 6,019,627) in view of Heng et al. (US 5,257,945).

Embo discloses a branching device for at least one electric line, the branching device comprising: a housing (3); and at least one electrically conducting wire terminal (9,4) that provides a branching contact, is accommodated in a holder (16) and includes contact lips , with cutting edges (at 11) for cutting through the insulation of the wire to be connected to the wire terminal; wherein: the at least one wire terminal further includes at least one connecting lug (4), a through-channel for the uninterrupted passage of the wire, and at least one holding-down clamp (13,5) which holds the wires in the through-channel of the wire terminals; at least one of the contact lips is flexible in a direction pointing away from the through-channel; and the holding-down clamp exhibits a

transverse plate that closes off the through-channel and has an opening (not labeled) through which the connecting lug of the wire terminal protrudes.

Embo discloses substantially the claimed invention except for the contact lips being located diagonally to the through-channel. Heng teaches a terminal having contact lips located diagonally to the through-channel so that the tip of the edge of the contact lip protrudes into the through-channel (see Fig.4); at least one of the contact lips being flexible in a direction pointing away from the through-channel, thus preventing slipping of the wire when the wire is pulled/pushed. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the terminal of Embo, as taught by Heng, to prevent slipping of the wire when the wire is pulled/pushed.

Regarding claim 25, Heng discloses the wire terminal exhibiting a generally octagonal outline with two opposing longer sides, two shorter sides orthogonal to the longer sides, and diagonal sides situated between the longer and shorter sides, and wherein the at least one holder includes a corresponding octagonal locating space for accommodating the wire terminal.

Regarding claim 26, Heng discloses the contact lips being generally aligned with the diagonal sides of the wire terminal.

Regarding claim 27, Embo, as modified by Heng, discloses the through-channel running in a straight line through the wire terminal.

Regarding claim 28, Embo, as modified by Heng, discloses the wire terminal being accommodated releasably in the holder.

Regarding claim 29, Embo, as modified by Heng, discloses the device including a number of wire terminals corresponding to at least a number of wires to be branched.

Regarding claim 30, Embo, as modified by Heng, discloses the contact lips being provided in pairs in each case on a wire terminal.

Regarding claim 31, Embo, as modified by Heng, discloses the spacing between two paired contact lips is less than or equal to the diameter of a wire to be connected to the wire terminal.

Regarding claim 32, Embo, as modified by Heng, discloses the edges of paired contact lips facing the through-channel running parallel to one another at least in sections.

Regarding claim 33, Embo, as modified by Heng, discloses two paired contact lips together form an entry section for the wire, with a spacing between the contact lips widening towards an entry side of the through-channel.

Regarding claim 34, Embo, as modified by Heng, discloses a notch being provided between the wire terminal and its holder.

Regarding claim 35, Embo, as modified by Heng, discloses the holder of the wire terminals being attached releasably to the housing.

Regarding claim 36, Embo, as modified by Heng, discloses multiple wire terminals and a common holder for all of the wire terminals.

Regarding claim 37, Embo, as modified by Heng, discloses a one common holding-down clamp for all wires.

Regarding claim 38, Embo, as modified by Heng, discloses the holding-down clamp representing a closure of the openings formed between the contact lips.

Regarding claim 39, Embo, as modified by Heng, discloses the holding-down clamp can be latched to the holder of the wire terminal.

Regarding claim 40, Embo, as modified by Heng, discloses the holding-down clamp can be latched to the housing.

Regarding claim 43, Embo, as modified by Heng, discloses the housing being assembled from a housing base section and a housing upper section.

Regarding claim 44, Embo, as modified by Heng, discloses the housing base section and the housing upper section can be screwed together (by 19,20).

Regarding claim 45, Embo, as modified by Heng, discloses a strain relief (24) being provided on the housing at the outlets for the lines.

Claims 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Embo and Heng, as applied to claim 1, and further in view of Toly (US 6,071,145).

Embo, as modified by Heng, discloses substantially the claimed invention except for the use of seals. Toly teaches the use of sealing rings (49) at the outlets of the line to protect the interior connections from dust and moisture. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use sealing rings on the outlets, as taught by Toly, to protect the interior connections from dust and moisture.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felix O. Figueroa whose telephone number is (571) 272-2003. The examiner can normally be reached on Mon.-Fri., 10:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 Ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Felix O. Figueroa
Art Unit 2833